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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

STAICOVICI, STEFAN

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 03/12/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/774,470

Applicant(s)

PETERSON, ERIC D.

Examiner

Stefan Staicovici

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5,7,16-21 is/are pending in the application.
- 4a) Of the above claim(s) 17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7,16 and 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment filed December 23, 2002 (Paper No. 8) has been entered. Claims 1-3, 5, 7 and 16 have been amended. Claims 4 and 6 have been canceled. New claims 19-21 have been added. Claims 1-3, 5, 7 and 16-21 are pending in the instant application.

### *Election/Restrictions*

2. Applicant's election without traverse of Group I in Paper No. 5 is acknowledged. Claims 17-18 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graver, Sr. (US Patent No. 4,390,668) in view of Sirhan *et al.* (US Patent No. 5,743,875) and in further view of EP 0 471 238 A2.

Garver, Sr. ('875) teaches the basic claimed process bonding a polymeric member (20) to a metallic member (12) in a fluid-tight relationship (see col. 8, lines 15-19) including, mounting

said polymeric member (20) against said metallic member (12) and further mounting an elastomeric member (24) over said polymeric (20) and metallic (12) members to form an assembly, positioning said assembly in an electromagnetic heating unit (28), heating said metallic member (12) by electromagnetic heating such that the heat generated brings the temperature of the polymeric member (20) to the softening temperature (see col. 4, lines 50-57) and applying pressure by constricting said elastomeric member (24) about said polymeric (20) and metallic (12) such as to bond said polymeric member (20) to said metallic member (12) in a fluid-tight relationship and form a bonding area adjacent a non-bonded area (see Figure 2 and 3). It is submitted that the softening temperature of a thermoplastic material is a temperature between the glass transition temperature and the melting temperature of said thermoplastic material.

Regarding claims 1 and 16, Garver, Sr. ('875) does not teach an intravascular catheter. Sirhan *et al.* ('875) teach an intravascular catheter having a bonded outer tubular polymeric member (32) to a metallic member (51) (see col. 6, lines 20-28 and col. 9, lines 48-57, and Figure 6). Therefore, it would have been obvious for one of ordinary skill in the art to have made an intravascular catheter as taught by Sirhan *et al.* ('875) by using the process of Garver, Sr. ('875) because, Sirhan *et al.* ('875) specifically teach that an intravascular catheter requires a process of bonding a metallic member to a polymeric member, whereas Garver, Sr. ('875) teaches a process of making a bond between a metallic and a polymeric member and also because, both references teach similar materials and solve a similar problem of bonding a metallic member to a polymeric member.

Further regarding claim 1, to address Applicant's concern that vinyl material is a heat shrinking material, the teachings of EP 0 471 238 A2 are used to show that shrink fit articles such as a tube, sleeve or tape are made from elastomers or thermoplastic rubbers having a vinyl component (see Abstract). Therefore, it would have been obvious for one of ordinary skill in the art to have provided a shrink fit articles such as a tube or sleeve as taught by EP 0 471 238 A2 in the process of Garver, Sr. ('875) in view Sirhan *et al.* ('875) because, EP 0 471 238 A2 teaches that elastomers or thermoplastic rubbers having a vinyl component generate a shrink fit article, whereas Garver, Sr. ('875) teaches that elastomeric member (24) can be made from a plasticized vinyl material (see col. 5, lines 31-33). It should be noted that the teachings of EP 0 471 238 A2 were used merely to address Applicant's concern that Garver, Sr. ('875) does not specifically that a vinyl material is a heat shrinking material.

In regard to claim 2, Garver, Sr. ('875) teaches that said polymeric member (20) includes an interior lumen (22) extending therethrough and at least a part of said metallic member (12) is disposed within said lumen (22). Further, Garver, Sr. ('875) teaches pressing said polymeric member (20) against said metallic member (12) by constricting said elastomeric member (24) (see col. 4, lines 50-58).

Specifically regarding claim 4, Garver, Sr. ('875) teaches that elastomeric member (24) can be made from a plasticized vinyl material (see col. 5, lines 31-33). It is submitted that a vinyl material is a heat shrinking material (*i.e.*, PVC).

Regarding claim 3, Sirhan *et al.* ('875) teach an intravascular catheter having a PEEK polymeric member as an alternative to a polyester polymeric member (see col. 9, lines 49-55).

Therefore, it would have been obvious for one of ordinary skill in the art to have made a PEEK intravascular catheter as taught by Sirhan *et al.* ('875) by using the process of Garver, Sr. ('875) in view of EP 0 471 238 A2 because, Sirhan *et al.* ('875) specifically teach that a PEEK intravascular catheter requires a process of bonding a metallic member to a polymeric member, whereas Garver, Sr. ('875) teaches a process of making a bond between a metallic and a polymeric member and also because, both references teach similar materials and solve a similar problem of bonding a metallic member to a polymeric member. Further, it should be noted that Sirhan *et al.* ('875) specifically teach that a PEEK/metallic bond is an equivalent alternative to a polyester/metallic bond, whereas Garver, Sr. ('875) teaches a polyester/metallic bond.

In regard to claim 6, Garver, Sr. ('875) teaches a collar (24) (see Figure 2).

5. Claims 5, 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graver, Sr. (US Patent No. 4,390,668) in view of Sirhan *et al.* (US Patent No. 5,743,875) and in further view of EP 0 471 238 A2 and Riggs (US Patent No. 4,636,272).

Garver, Sr. ('875) in view of Sirhan *et al.* ('875) and in further view of EP 0 471 238 A2 teach the basic claimed process as described above.

Regarding claims 5 and 7, although Garver, Sr. ('875) in view of Sirhan *et al.* ('875) and in further view of EP 0 471 238 A2 teach a heat shrinking material, Garver, Sr. ('875) in view of Sirhan *et al.* ('875) do not specifically teach a fluoropolymer that is removed after bonding has occurred. Riggs ('272) teaches a process for bonding polymeric tubes (28, 34) including, using a Teflon (fluoropolymer) heat shrinking member (38) to apply pressure and removing said member after bonding has occurred. Therefore, it would have been obvious for one of ordinary skill in the

art to have provided a Teflon (fluoropolymer) heat shrinking member (38) as taught by Riggs ('272) to increase the bonding pressure in the process of Garver, Sr. ('875) in view of Sirhan *et al.* ('875) and in further view of EP 0 471 238 A2 because, Riggs ('272) specifically teaches that a Teflon (fluoropolymer) heat shrinking member is to be used to apply pressure when bonding dissimilar materials and can be removed after bonding, and also because both Garver, Sr. ('875) and Riggs ('272) teach electromagnetic bonding, hence teaching similar processes.

6. Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graver, Sr. (US Patent No. 4,390,668) in view of Sirhan *et al.* (US Patent No. 5,743,875) and in further view of EP 0 471 238 A2, Riggs (US Patent No. 4,636,272) and JP 60-004579.

Garver, Sr. ('875) in view of Sirhan *et al.* ('875) and in further view of EP 0 471 238 A2 and Riggs ('272) teach the basic claimed process as described above.

Regarding claims 19 and 21, Garver, Sr. ('875) in view of Sirhan *et al.* ('875) and in further view of EP 0 471 238 A2 and Riggs ('272) do not teach a masking tape. JP 60-004579 teaches the use of a masking tape for making temporary surface protection. Therefore, it would have been obvious for one of ordinary skill in the art to have provided a masking tape as taught by JP 60-004579 in the process of Garver, Sr. ('875) in view of Sirhan *et al.* ('875) and in further view of EP 0 471 238 A2 and Riggs ('272) because, JP 60-004579 specifically teaches the use of a masking tape for making temporary surface protection.

#### ***Response to Arguments***

7. Applicant's remarks filed December 23, 2002 (Paper No. 8) have been considered.

Applicant argues that in Garver, Sr. ('875) "there is absolutely no suggestion that the composition referred to is in fact heat shrinkable" (see pages 5-6 of the amendment filed December 23, 2002). Further, Applicant argues that because "an interference fit between the second portion 16 and the first portion 14 is called for...and that the second portion 16 is to have 'rubber-like' qualities and an interior resilience by virtue of which the member 16 resiliently resists and **recovers from deformation**...[it is] the **interference fit**...securing the needle... [and] constricting the thermoplastic member" (see page 6 of the amendment filed December 23, 2002). However, it should be noted that:

(a) a "prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) (see MPEP § 2141.02). Therefore, Garver, Sr. ('875) also teaches that the "elastomeric member 24 exerts a uniform compression force radially inwardly upon the periphery of the portion 21 of the thermoplastic member 20...[and it is this] force [that] tightly secures the thermoplastic member 20 against rotational and lateral movement within the elastomeric member bore 26 without the use of solvents or other bonds." Further, Garver, Sr. ('875) teaches that this "same force also serves to secure the needle 18 within the thermoplastic member bore 22 when the thermoplastic member 22 is exposed to heat...When the thermoplastic member 20 is in this softened or deformable state, the force exerted by the elastomeric member 24 upon the thermoplastic member portion 21 serves to uniformly constrict the normal interior configuration of the bore 22 ...radially inwardly toward the needle 18, until a conformance fit configuration is



achieved about the needle 18.” Further in response to Applicant’s concern that vinyl material is a heat shrinking material, the teachings of EP 0 471 238 A2 are used to show that shrink fit articles such as a tube, sleeve or tape are made from elastomers or thermoplastic rubbers having a vinyl component. Therefore, it is submitted that if a vinyl material is a heat shrinking material as taught by EP 0 471 238 A2, then the elastomeric member (24) of Garver, Sr. (‘875), made from a plasticized vinyl material (see col. 5, lines 31-33), is a heat shrinking material.

(b) in “considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968)” (see MPEP § 2144.01);

In response to applicant's arguments against the teachings of Garver, Sr. (‘875) and Riggs (‘272) individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The teachings of Riggs (‘272) were used to show the use of a Teflon (fluoropolymer) heat shrinking member (38) to apply pressure and removing said member after bonding has occurred. Therefore, it would have been obvious for one of ordinary skill in the art to have provided a Teflon (fluoropolymer) heat shrinking member (38) as taught by Riggs (‘272) to increase the bonding pressure in the process of Garver, Sr. (‘875) in view of Sirhan *et al.* (‘875) and in further view of EP 0 471 238 A2 because, Riggs (‘272) specifically teaches that a Teflon (fluoropolymer) heat shrinking member is to be used to apply pressure when bonding dissimilar

materials and can be removed after bonding, and also because both Garver, Sr. ('875) and Riggs ('272) teach electromagnetic bonding, hence teaching similar processes.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

#### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (703) 305-0396. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM and alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino, can be reached at (703) 308-3853. The fax phone number for this Group is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Stefan Staicovici, PhD



Primary Examiner

3/10/03

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March 10, 2003